



FortiManager 1000D

QuickStart Guide



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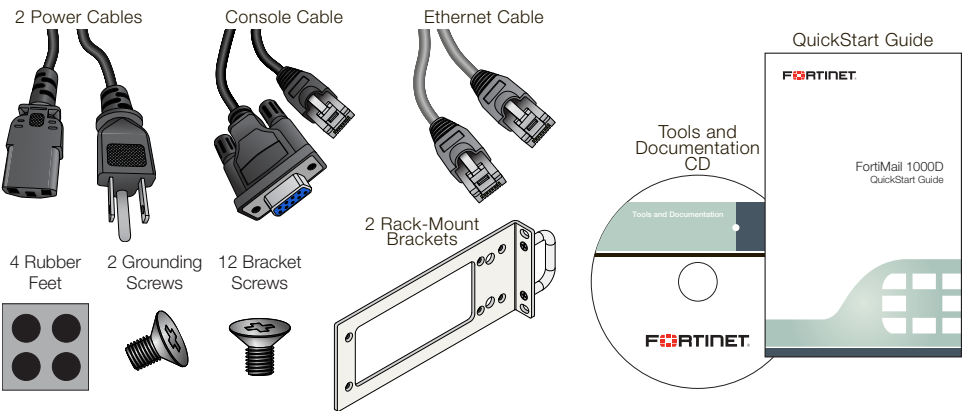
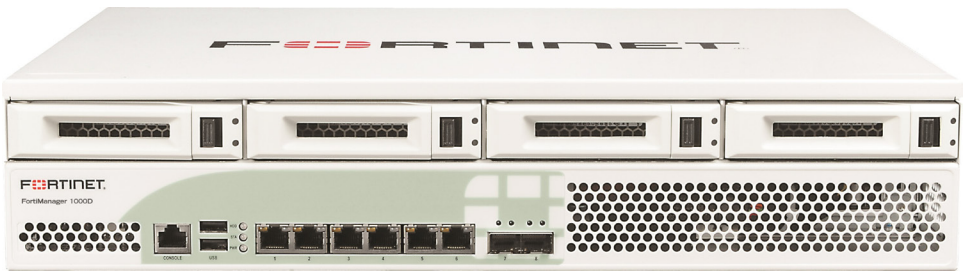
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Package Contents

Fortinet's consolidated security solutions provide an integrated set of core security and network services in a single, easy-to-manage, high-performance appliance that is capable of supporting a wide range of deployment scenarios.

Your box contains the following:

- | | |
|----------------------------|-----------------------|
| FortiManager 1000D | Ethernet Cable |
| QuickStart Guide | 4 Rubber Feet |
| Tools and Documentation CD | 2 Grounding Screws |
| 2 Power Cables | 12 Bracket Screws |
| Console Cable | 2 Rack-Mount Brackets |



Note: Accessories may not be exactly as shown.

Installation

The FortiManager unit can be placed on any flat surface, or mounted in any standard 19 inch (48.3 cm) rack unit with the provided rack-mount brackets and screws.

Please read the Cautions and Warnings section prior to installing your device.

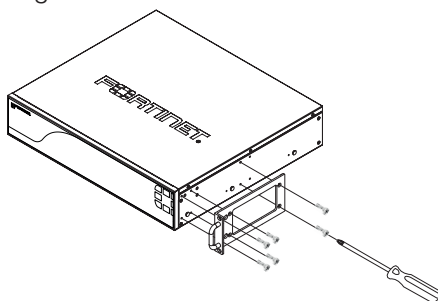
Caution: Electrostatic discharge (ESD) can damage your Fortinet equipment.

Caution: Do not place heavy objects on the unit.

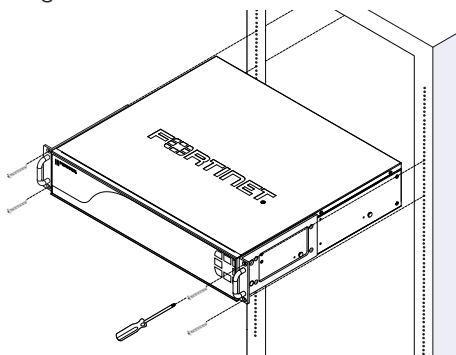
To install the FortiManager unit into a rack:

Caution: To avoid personal injury or damage to the unit, it is recommended that two or more people install the unit into the rack.

1. Ensure that the FortiManager unit is placed on a stable surface prior to rack-mount installation.
2. Attach the provided rack-mount brackets to the sides of the unit using the provided screws.
 - a. If you are installing the unit into a four-post rack, attach the rack-mount brackets with the handles aligned with the front of the unit.



- b. If you are installing the unit into a two-post rack, attach the rack-mount brackets with the handles aligned with the middle of the unit.

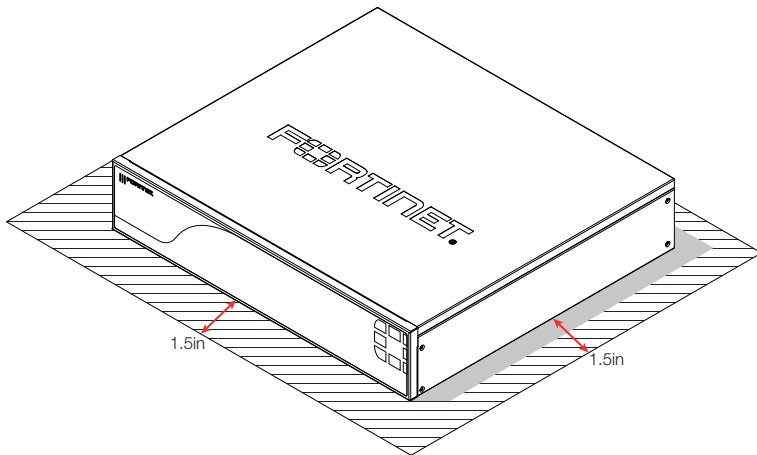


3. Position the FortiManager unit in the rack. Ensure there is enough room around the unit to allow for sufficient air flow.
4. Line up the rack-mount bracket holes to the holes on the rack and ensure that the FortiManager unit is level.
5. Finger tighten four rack-mount screws to attach the unit to the rack.
6. Verify that the spacing around the FortiManager unit conforms to requirements and that the unit is level, then tighten the rack-mount screws with an appropriate screwdriver.
7. Using the provided power cables, plug the cables into the rear of the unit, and then into a grounded electrical outlet or a separate power source such as an uninterruptible power supply (UPS) or a power distribution unit (PDU).

Note: If the unit has a redundant power supply, each power cable should be connected to a different power source. In this way, if one power source fails, the other may still be operational and the unit will not lose power.

To install the unit on a flat surface:

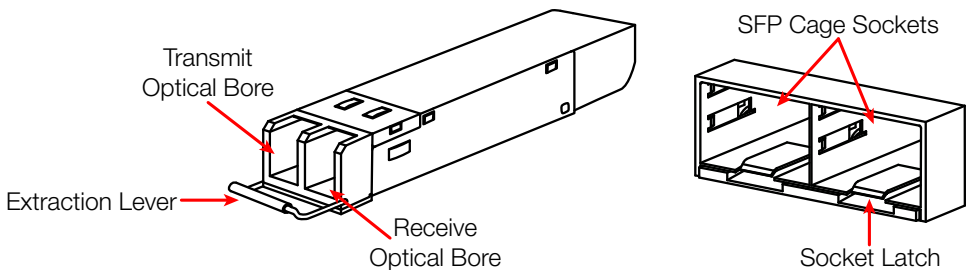
1. Ensure that the surface onto which the FortiManager unit to be installed is clean, level, and stable and that there is at least 1.5 inches (3.8cm) of clearance on all sides to allow for adequate airflow.
2. Attach the provided rubber feet to the bottom of the FortiManager unit.
3. Place the unit in the designated location.
4. Verify that the spacing around the FortiManager unit conforms to requirements and that the unit is level.



5. Using the provided power cables, plug the cables into the rear of the unit, and then into a grounded electrical outlet or a separate power source such as an uninterruptible power supply (UPS) or a power distribution unit (PDU).

Note: If the unit has a redundant power supply, each power cable should be connected to a different power source. In this way, if one power source fails, the other may still be operational and the unit will not lose power.

SFP Transceivers



Caution: SFP transceivers are static sensitive devices. Use an ESD wrist strap or similar grounding device when handling transceivers.

Caution: Do not install or remove SFP transceivers while fiber-optic cables are still attached. This can cause damage to the cables, cable connectors, and the optical interfaces. It may also prevent the transceiver from latching correctly into the socket connector.

Note: Installing and removing SFP transceivers can shorten their useful life. Do not install or remove transceivers more than is necessary.

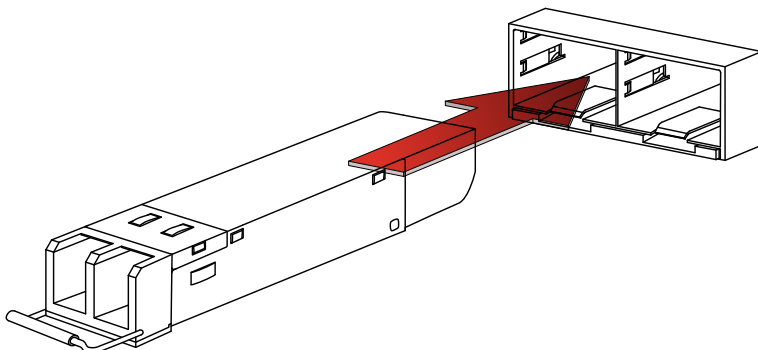
To install the SFP transceivers:

1. Ensure that you are properly grounded.
2. Remove the caps from SFP cage sockets on the front panel of the unit.
3. Position the SFP transceiver in front of the cage socket opening and ensure that the transceiver is correctly oriented.

When the transceiver is correctly oriented, the extraction lever will be level with the socket latch.

Note: SFP cage socket orientation may vary. Ensure that the SFP transceiver module is correctly oriented each time that you are inserting a transceiver.

4. Hold the sides of the SFP transceiver and slide it into the cage socket until it clicks into place.

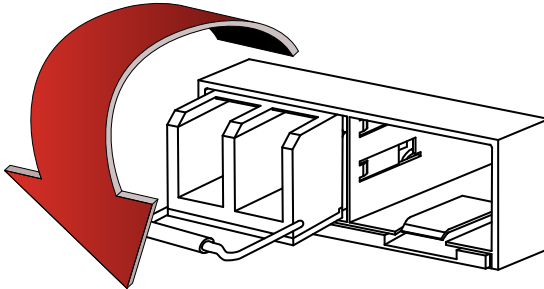


Caution: Do not force the SFP transceivers into the cage slots. If the transceiver does not easily slide in and click into place, it may not be aligned correctly or may be upside down. If this happens, remove the SFP transceiver, realign it or rotate it and slide it in again.

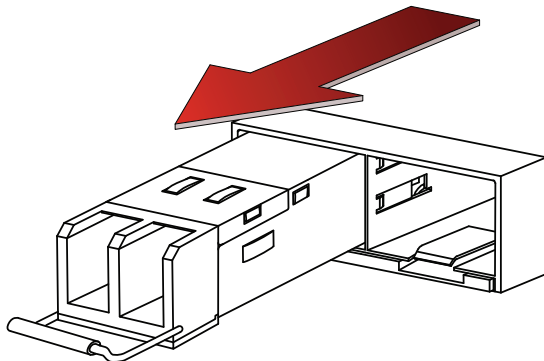
5. Press the transceiver firmly into the cage socket with your thumb.
6. Verify that the transceiver is latched correctly by grasping the sides of the transceiver and trying to pull it out without lowering the extraction lever.
If the transceiver cannot be removed, it is installed and latched correctly.
If the transceiver can be removed, reinsert it and press harder with your thumb.
If necessary, repeat this process until the transceiver is securely latched into the cage socket.

To remove the SFP transceivers:

1. Ensure that you are properly grounded.
2. If applicable, disconnect the fiber-optic cable from the transceiver connector and install a clean dust plug in the transceiver's optical bores.
3. Pull the extraction lever out and down to eject the transceiver.
If you are unable to use your finger to open the lever, use a small flat-head screwdriver or other similar tool to open the lever.



4. Hold the sides of the transceiver and carefully pull it away from the cage socket.



5. Replace the cap on the SFP cage socket and place the removed SFP transceiver into an antistatic bag.

Note: Follow proper fiber-optic handling procedures when installing and removing SFP transceivers to ensure the devices remain clean and are not damaged.

Configuring Your Device

The FortiManager unit requires some basic configuration to add it to your network. These basic steps include assigning IP addresses, DNS settings, and the default gateway. Until these steps are completed traffic will not flow through the device.

The FortiManager unit can be configured using the Web-based Manager or the Command Line Interface (CLI).

This section will step you through both methods of connecting to the unit. Use whichever method you are most comfortable with.

To Connect to the Web-based Manager:

1. Connect the FortiManager unit Ethernet port 1 to a management computer using the provided Ethernet cable.
2. Configure the management computer to be on the same subnet as the internal interface of the FortiManager unit:
 - a. Browse to the *Network and Sharing Center > Change Adapter Settings > Local Area Connection Properties > Internet Protocol Version 4 (TCP/IPv4) Properties*.
 - b. Change the IP address of the management computer to 192.168.1.2 and the netmask to 255.255.255.0.
3. To access the FortiManager unit Web-based Manager, start a browser of your choice and browse to <https://192.168.1.99/>.
4. Type `admin` in the *Name* field, leave the *Password* field blank, and select *Login*.

You can now proceed with configuring your FortiManager unit.

To Connect to the CLI:

You can configure all FortiManager configuration options from the CLI.

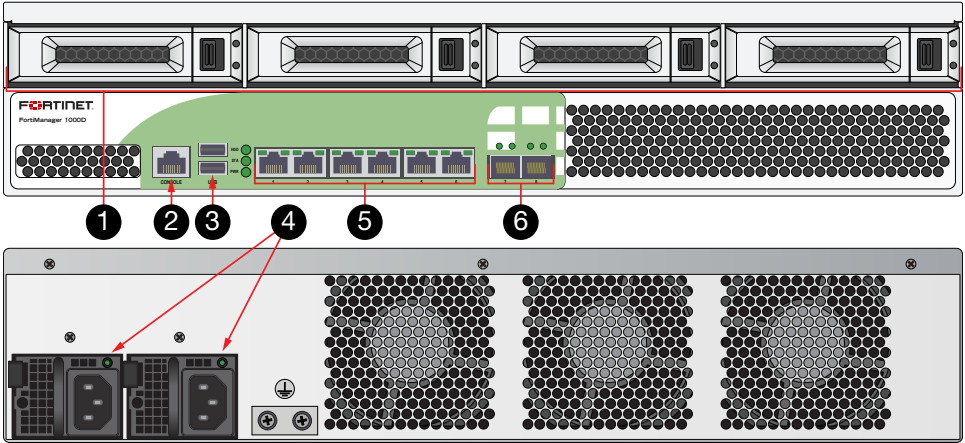
1. Connect the FortiManager unit console port to the management computer using the provided console cable.
2. Start a terminal emulation program on the management computer. Use the following settings:

- Baud Rate: 9600
- Data bits: 8
- Parity: None
- Stop bits: 1
- Flow Control: None

3. Press *Enter* on your keyboard to connect to the CLI.
4. Type `admin` in the *Name* field, leave the *Password* field blank, and press *Enter*.

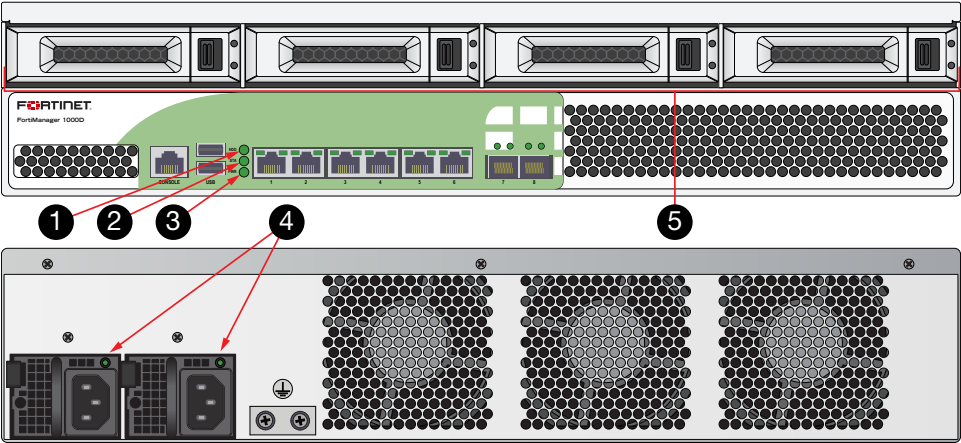
You can now proceed with configuring your FortiManager unit.

Technical Specifications



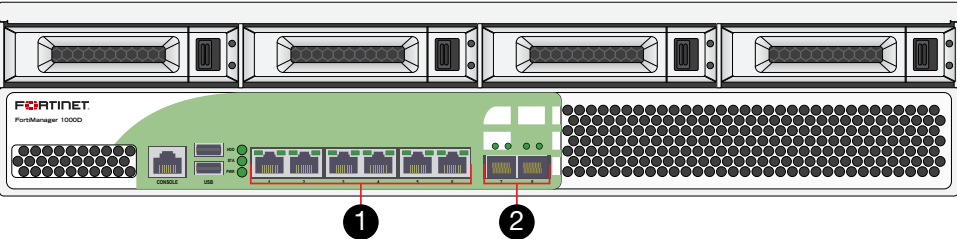
| # | Interface | Type | Description |
|---|--------------------|-------|---|
| 1 | Hard Drive | SATA | Four 2TB hard drives. |
| 2 | Console | RJ-45 | Optional RS-232 serial connection to the management computer. Provides access to the CLI. |
| 3 | USB | USB-A | Two USB server ports. |
| 4 | Power Supplies | | 100-240V AC, 5-3A, 50-60Hz, redundant power supplies |
| 5 | Ethernet Ports 1-6 | RJ-45 | Gigabit Ethernet ports for connection to your network and the Internet. |
| 6 | SFP Ports 7-8 | SFP | 1Gbps/auto small form-factor pluggable transceiver ports. |

LED Specifications 1



| # | LED | State | Description |
|---|----------------------------|------------------------|---|
| 1 | HDD | Off | This LED is not used. |
| 2 | STA | Off | The unit is operating normally. |
| | | Red | The unit has a major alarm. |
| 3 | PWR | Green | The system is on. |
| | | Off | The system is off. |
| | | Green | The power supply is running. |
| | | Flashing Green | The power supply is functional but not running. |
| 4 | Power Supplies | Red | The power supply has failed. |
| | | Flashing Red | Only this power supply is not powered. |
| | | Flashing Red and Green | Power supply warning. |
| | | Off | The power supply is not powered. |
| 5 | Hard Drive Power (Top LED) | Blue | Hard drive installed and powered. |
| | | Off | No hard drive detected. |
| | | Flashing Green | Hard drive activity. |
| 5 | Hard Drive Status | Red | Hard drive failure. |
| | | Off | Hard drive is idle. |

LED Specifications 2



| # | LED | State | Description |
|---|-------------------------|-----------------|--|
| 1 | Ethernet Ports Activity | Amber | Port is active. |
| | | Flashing Amber | Port is transmitting and receiving data. |
| | | Off | Port is not connected. |
| 1 | Ethernet Ports Speed | Green | Port is connected at 1Gbps. |
| | | Amber | Port is connected at 100Mbps. |
| | | Off | Port is connected at 10Mbps or not in use. |
| 2 | SFP Ports Activity | Yellow | Port is active. |
| | | Flashing Yellow | Port is transmitting and receiving data. |
| | | Off | Port is not connected. |
| 2 | SFP Ports Link | Orange | Port is connected at 1Gbps. |
| | | Off | Port is not connected |

Cautions and Warnings

Please review the following cautions and warnings.

Environmental and mounting specifications

Operating Temperature: 0 - 40°C (32 - 104°F)

Storage Temperature: -25 - 70°C (-13 - 158°F)

Humidity: 5 to 95% non-condensing

Operating Altitude: <2250m (7400ft)

Elevated Operating Ambient: If installed in a closed or multi-unit rack assembly, the operating ambient temperature of the rack environment may be greater than room ambient. Therefore, consideration should be given to installing the equipment in an environment compatible with the maximum ambient temperature (T_{ma}) specified by the manufacturer.

Reduced Air Flow: Installation of the equipment in a rack should be such that the amount of air flow required for safe operation of the equipment is not compromised.

Mechanical Loading: Mounting of the equipment in the rack should be such that a hazardous condition is not achieved due to uneven mechanical loading.

Circuit Overloading: Consideration should be given to the connection of the equipment to the supply circuit and the effect that overloading of the circuits might have on overcurrent protection and supply wiring. Appropriate consideration of equipment nameplate ratings should be used when addressing this concern.

Reliable Earthing: Reliable earthing of rack-mounted equipment should be maintained. Particular attention should be given to supply connections other than direct connections to the branch circuit (e.g. use of power strips).

Federal Communication Commission (FCC) – USA

This device complies with Part 15 of FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received; including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy, and if it is not installed and used in accordance with the instruction manual, it may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference, in which case the user will be required to correct the interference at his own expense.

WARNING: Any changes or modifications to this product not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Industry Canada Equipment Standard for Digital Equipment (ICES) – Canada

CAN ICES-3 (A) / NMB-3 (A)

This digital apparatus does not exceed the Class A limits for radio noise emissions from digital apparatus set out in the Radio Interference Regulations of the Canadian Department of Communications.

Le présent appareil numérique n'émet pas de bruits radioélectriques dépassant les limites applicables aux appareils numériques de la classe A prescrites dans le Règlement sur le brouillage radioélectrique édicté par le ministère des Communications du Canada.

Voluntary Control Council for Interference (VCCI) – Japan

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Bureau of Standards Metrology and Inspection (BSMI) – Taiwan

這是甲類的資訊產品，在居住的環境中使用時，可能會造成射頻干擾，在這種情況下，使用者會被要求採取某些適當的對策。

China

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European Conformity (CE) - EU

This is a Class A product. In a domestic environment, this product may cause radio interference, in which case the user may be required to take adequate measures.

Grounding

Ensure your Fortinet product is connected and properly grounded to a lightning and surge protector. WAN or LAN connections that enter the premises from outside the building should be connected to an Ethernet CAT5 (10/100 Mb/s) surge protector.

Shielded Twisted Pair (STP) Ethernet cables should be used whenever possible rather than Unshielded Twisted Pair (UTP).

Do not connect or disconnect cables during lightning activity to avoid damage to your Fortinet product or personal injury.

Electrostatic discharge (ESD) can damage Fortinet equipment. Only perform the procedures described in this document from an ESD workstation. If no such station is available, you can provide some ESD protection by wearing an anti-static wrist strap and attaching it to an available ESD connector or other bare metal object.

Caution: Disconnect power supply cords before servicing

Caution: For devices that contain a battery there is a risk of explosion if battery is replaced by an incorrect type. Recycle used batteries according to your local regulations.

IMPORTANT: Switzerland: Annex 4.10 of SR814.013 applies to batteries.

警告

本電池如果更換不正確會有爆炸的危險

請依製造商說明書處理用過之電池

Documentation and Links

The following Fortinet web pages provide information and resources for your Fortinet product:

1. Customer Service & Support: <https://support.fortinet.com>

On this page you can create a support account with Fortinet, register and manage your products, download updates, firmware images and release notes, and create technical support tickets.

2. Technical Documentation: <http://docs.fortinet.com>

This page provides the most up-to-date versions of Fortinet publications for the entire family of Fortinet products.

3. Knowledge Base: <http://kb.fortinet.com>

This page provides Fortinet technical documentation, such as troubleshooting, how-to articles, example configurations, FAQs, technical notes, and more.

4. Technical Discussion Forums: <https://support.fortinet.com/forum>

This page allows you to communicate with other customers and Fortinet partners about Fortinet products, services, and configuration issues in a forum environment.

5. Training Services: <http://training.fortinet.com>

This page provides course descriptions, availability, schedules, and locations of training programs in your area.

6. FortiGuard Threat Research and Response: <http://www.fortiguard.com>

This page provides up-to-date information on vulnerabilities and threats, and includes a virus scanner, Internet Protocol (IP) signature look-up, web filtering tools, and related information.

Tools and Documentation CD

The tools and documents on this CD are current as of shipping time.

Comments on Technical Documentation

Please send comments or information about any errors or omissions in this or any Fortinet technical documents to techdoc@fortinet.com.

Register Your Product

If you have not registered your Fortinet product, please register your product now.

Register

Register your Fortinet product in order to receive:

- Technical Support
- New product features
- Protection from new threats

Enregistrer

Vous devez enregistrer le produit pour recevoir:

- Support technique
- Nouvelles fonctionnalités du produit
- Protection contre de nouvelles menaces

Registra

La reistrazione ti permette di usufruire di:

- Supporto Tecnico
- Nuove funzionalita
- Protezione dalle ultime minacce

Registrar

Debe registrar el producto para recibir:

- Apoyo técnico
- Nuevas funcionalidades del producto
- Protección contra ataques

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Toll free: 1 866 648 4638

Phone: 1 408 486 7899

Fax: 1 408 235 7737

Email: register@fortinet.com

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6. As an exception to the Sections above, you may also combine or link a "work that uses the Library" with the Library to produce a work containing portions of the Library, and distribute that work under terms of your choice, provided that the terms permit modification of the work for your own use and reverse engineering for debugging such modifications. You must give prominent notice with each copy of the work that the Library is used in it and that the Library and its use are covered by this License. You must supply a copy of this License. If the work during execution displays copyright notices, you must include the copyright notice for the Library among them, as well as a reference directing the user to the copy of this License. Also, you must do one of these things:

a) Accompany the work with the complete corresponding machine-readable source code for the Library including whatever changes were used in the work (which must be distributed under Sections 1 and 2 above); and, if the work is an executable linked with the Library, with the complete machine-readable "work that uses the Library", as object code and/or source code, so that the user can modify the Library and then relink to produce a modified executable containing the modified Library. (It is understood that the user who changes the contents of definitions files in the Library will not necessarily be able to recompile the application to use the modified definitions.)

b) Use a suitable shared library mechanism for linking with the Library. A suitable mechanism is one that (1) uses at run time a copy of the library already present on the user's computer system, rather than copying library functions into the executable, and (2) will operate properly with a modified version of the library, if the user installs one, as long as the modified version is interface-compatible with the version that the work was made with.

c) Accompany the work with a written offer, valid for at least three years, to give the same user the materials specified in Subsection 6a, above, for a charge no more than the cost of performing this distribution.

d) If distribution of the work is made by offering access to copy from a designated place, offer equivalent access to copy the above specified materials from the same place.

e) Verify that the user has already received a copy of these materials or that you have already sent this user a copy.

For an executable, the required form of the "work that uses the Library" must include any data and utility programs needed for reproducing the executable from it. However, as a special exception, the materials to be distributed need not include anything that is normally distributed (in either source or binary form) with the major components (compiler, kernel, and so on) of the operating system on which the executable runs, unless that component itself accompanies the executable. It may happen that this requirement contradicts the license restrictions of other proprietary libraries that do not normally accompany the operating system. Such a contradiction means you cannot use both them and the Library together in an executable that you distribute.

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